# Smoking Rates by Pay Group, Gender and Service in the United States Department of Defense

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# Objective

Even though the U.S. Department of Defense (DoD) has taken positive steps to deglamorize smoking and discourage tobacco use by military personnel, the results of the 2002 DoD Survey of Health Related Behaviors Among Military Personnel demonstrate an alarming increase in tobacco use. Specific populations and subpopulations in the U.S. Department of Defense with high smoking rates are identified as a precursor to developing effective countermeasures to decrease smoking behavior among military personnel.

#### Methods

Population-based secondary analysis of the 2002 Survey of Health Related Behaviors Among Military Personnel according to group, gender and service.

#### Results

All services demonstrated higher rates of tobacco smoking among males than that of civilian counterparts. The highest rate was 51% among males of rank E1-E3. Females of rank E1-E3 had a rate of 35%. The lowest rate occurred among females of rank O4-O10 at 4.4% with males of this rank having a rate of 5.9%. Smoking rates showed a steady decline as rank increased for both enlisted and officer personnel. Newly enlisted personnel smoke at the highest rates. There is a steady decreasing trend in smoking with changes in age, rank, and marital status (from single to married). Tobacco control measures must be focused on newly enlisted personnel.

## **Smoking Status by Gender and Pay Grade**

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Smoker, Male							
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (r
1. Army	56.3%	42.1%	22.7%	18.6%	13.8%	4.3%	34.9%
2. All DoD	51.1%	38.2%	22.0%	22.0%	10.9%	5.9%	31.5% (2879
Smoker, Female							
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (
1. Army	36.5%	26.4%	18.4%	16.7%	9.3%	0.0%	23.8%
2. All DoD	35.3%	28.5%	22.0%	11.4%	9.2%	4.4%	25.1% (754
Either Beginning or Qui	itting, Male						
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (
1. Army	4.0%	10.4%	16.7%	19.5%	13.3%	11.4%	11.8% (264
2. All DoD	5.7%	11.8%	21.2%	19.8%	13.1%	13.1%	13.3% (121
Either Beginning or Qui	itting, Female						
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (
1. Army	7.9%	8.2%	14.5%	20.8%	10.2%	16.2%	10.2%
2. All DoD	9.6%	11.0%	18.4%	22.9%	12.8%	17.3%	12.4% (373
Nonsmoker, Male							
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (
1. Army	37.9%	46.7%	60.1%	60.5%	72.4%	84.3%	52.4% (1178
2. All DoD	40.5%	48.1%	55.2%	60.7%	74.5%	79.6%	53.3% (487
Nonsmoker, Female							
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (
1. Army	53.7%	63.3%	65.8%	58.3%	79.6%	83.8%	64.3% (556
2. All DoD	53.0%	58.6%	57.1%	62.9%	76.5%	76.6%	60.6% (182
Male: Army=2246, All DoD=91	143						

Male: Army=2246, All DoD=9143 Female: Army=865, All DoD=3006

Source: 2002 DoD Survey of Health Related Behaviors Among Military Personnel

# **Spit Tobacco Use by Gender and Pay Grade**

Spit Tobacco Use by Ma	ales						
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (n)
1. Army	21.1%	15.2%	14.3%	10.2%	19.9%	14.3%	15.8% (354)
2. All DoD	19.9%	14.0%	11.6%	11.0%	13.7%	9.7%	14.1% (1287)
Spit Tobacco Use by Females							
Pay Grade by Service	E1-E3	E4-E6	E7-E9	W1-W5	01-03	04-010	Overall % (n)
1. Army	1.0%	0.9%	2.6%	0.0%	0.0%	0.0%	1.0% (9)
2. All DoD	1.2%	0.7%	1.4%	0.0%	0.6%	0.0%	0.8% (25)

Male: Army=2246, All DoD=9143 Female: Army=865, All DoD=3006

**Source:** 2002 DoD Survey of Health Related Behaviors Among Military Personnel

## Civilian Cigarette Use by Gender and Age

	Aged 12-17	Aged 18-25	Aged 26+
Male	12.3%	44.4%	28.3%
Female	13.6%	37.1%	22.5%

Source: 2002 National Survey on Drug Use and Health

#### Civilian Spit Tobacco Use by Gender and Age

Male = 6.4%		
Female = 0.4%		
Aged 12-17	Aged 18-25	Aged 26+
2%	4.8%	3.2%

Source: 2002 National Survey on Drug Use and Health

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## Smoking Tobacco - Bottom Line

Newly enlisted Army male personnel smoke at a very high rate while females also smoke at a high rate.

## Spit Tobacco - Bottom Line

Newly enlisted Army male personnel use spit tobacco at the highest rate while relatively few females use spit tobacco.

#### Results

Army personnel use smoking tobacco and spit tobacco products at high rates that are highest among newly enlisted male personnel and lowest among senior officers.

#### Discussion

There is a demonstrated need to curb the use of tobacco products among young, newly enlisted personnel in both the Army and All DoD.

## Recommendation

Target newly enlisted personnel of rank E1-E3 to receive anti-tobacco interventions in a variety of modalities having the net effect of curbing tobacco use.